

Attorney Docket No. 07319-005002
Serial No.: 09/837,876
Amendment dated January 29, 2004
Reply to Office Action dated September 30, 2003

Amendment to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

Kindly cancel claim 1, and substitute the following new claims therefore:

1. (Cancelled)
2. (New) A lighting system, comprising:
 - a memory, storing information indicative of at least one image; and
 - a driver, which outputs a signal based on said at least one image, said signal adapted for controlling each element of an array of devices between a first condition of light passing and a second condition of light blocking, which produces a shaped beam of light based on said at least one image.
3. (New) A system as in claim 2, further comprising a liquid crystal device as said array of devices.

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4. (New) A system as in claim 3, further comprising a lighting element which produces a beam of light that is altered by said liquid crystal device.

5. (New) A system as in claim 2, wherein said memory stores information indicative of a matrix of pixel signals, said information indicative of intensity of each of a plurality of points within an image field.

6. (New) A system as in claim 2, further comprising, as said array of devices, and array of electro-optical devices which are transformable between first and second conditions, based on said output signal from said driver.

7. (New) A system as in claim 1, wherein said driver outputs a signal indicative of a silhouette of the selected image having a portion representing the selected image that is transparent, and a portion representing parts other than the selected image which is opaque.

8. (New) A system as in claim 7, wherein said driver outputs a control signal which will form a light beam of a triangular shape.

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9. (New) A system as in claim 7, wherein said driver outputs a control signal, which will form a light beam of a circular shape.

10. (New) A lighting system as in claim 2, wherein said driver continually produces the same output signal for an indeterminate time until a desired change is made.

11. (New) A lighting system as in claim 2, wherein said signal represents a transparent facsimile of the shape based on said memory.

12. (New) A lighting system as in claim 2, wherein said signal represents a silhouette of the selected image in a selected color, having a portion in the selected color representing the selected image, and another portion, representing parts other than the selected image, which is substantially opaque.

13. (New) A lighting system as in claim 2, wherein said signal represents an animated silhouette, having a shape which

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continuously changes as an animation, and having a portion outside the shape which is substantially opaque.

14. (New) A lighting system as in claim 2, further comprising a light, connected to receive said output signal from said driver, said light including a light beam source, a moving portion, which allows the light to move, and an array of electro-optical devices which are transformable between a first state which allows light to be projected, and a second state which blocks light from being projected, said array controlled based on said output signal to shape the light beam from said source.

15. (New) A lighting system as in claim 14, further comprising a color control, and wherein said output signal commands a specific color, which is controlled by said color control.

16. (New) A lighting system as in claim 2, further comprising an image processor, in communication with said driver, which processes said image.

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17. (New) A lighting system, comprising:
an image source, including at least one image;
a driver, coupled to said image source, and obtaining
information about said at least one image from said image
source, and producing an output signal indicative of said image
which represents a light beam shaping output signal, which
output signal controls an external device to shape outer edges
of the light beam, said driver operating to produce a continuous
signal for an indeterminate amount of time, until receiving
information of a new image to be used in shaping a light beam.

18. (New) A system as in claim 17, wherein said image is
an image representing only a specified shape for the light beam.

19. (New) A system as in claim 17, wherein said image is
an image representing both shape and intensity for different
portions of the shaped light beam.

20. (New) A system as in claim 17, wherein said at least
one image includes an image of a circle, producing an output
signal which shapes the light beam to be circular.

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21. (New) A system as in claim 17, wherein said output signal is a signal adapted for driving an array of electro-optical devices which are transformable between a first condition which passes light and a second condition which does not pass light.

22. (New) A system as in claim 19, wherein said signal is adapted for driving an array of liquid crystal devices that change between a condition of transparency and opaqueness.

23. (New) A system as in claim 17, further comprising an array of electro-optical devices, driven by said output signal, and transformable by said output signal, on an element-by-element basis, between a first condition which passes light, and a second condition which does not pass light, thereby collectively producing a shaped signal.

24. (New) A system as in claim 22, wherein said array of electro-optical device is a liquid crystal array.

25. (New) A system as in claim 17, wherein said driver produces an /output signal/ that continuously represents a specified shape.

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26. (New) A system as in claim 17, wherein said output signal is indicative of a portion of the shape which is substantially clear.

27. (New) A system as in claim 17, wherein said output signal is indicative of a portion of the shape which is not opaque, and also includes information indicative of a color within the non-opaque portion.

28. (New) A system as in claim 17, wherein said driver outputs a control signal which will form a light beam of a triangular shape.

29. (New) A system as in claim 17, wherein said signal represents an animated silhouette, having a shape which continually changes as an animation, and having a portion outside the shape which is substantially opaque.

30. (New) A system as in claim 17, further comprising lighting instrument, connected to receive said output signal from said driver, and including a light beam source which projects light, an array of electro-optical devices that are

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transformable between first and second states based on said signal from said driver, said first state being one allows light to be projected, and said second state being one which blocks light from being projected, and said array controlled based on said output signal to shape the light beam from said light beam source.

31. (New) A lighting system, comprising:
an image source, including information of at least one image; and
a driver which outputs a signal based on said at least one image, said signal adapted for controlling an array of devices between a first condition in which light is passed to a desired target, and a second condition in which light is not passed to said desired target, and where said first and second conditions cause light to be projected to the target, having a shape which is based on said at least one image, and where said signal further includes a color portion, which commands a color of the shaped portion of the image which is projected to the target.

32. (New) A lighting system as in claim 31, wherein said image represents both shape and intensity of the light beam.

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33. (New) A lighting system as in claim 31, wherein said image represents a circular shaped light beam.

34. (New) A lighting system as in claim 31, wherein said image represents a triangular shaped light beam.

35. (New) A system as in claim 31, wherein said output signal is a signal that is adapted for driving an array of electro-optical devices are transformable between a first condition which passes light and a second condition which does not pass light.

36. (New) A lighting unit, comprising:

a housing;

a lighting device, mounted within said housing, producing an output beam of light along a light beam axis;

an electro-optical device, within said housing, along said light beam axis, adapted for modifying said beam of light to produce an output light beam.

37. (New) A lighting unit as in claim 36, wherein said in electro-optical device is an array of liquid crystals.

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38. (New) A lighting unit as in claim 36, further comprising a cooling mechanism which cools said electro-optical device.

39. (New) A lighting unit as in claim 38, wherein said cooling mechanism is a convection cooling mechanism.

40. (New) A lighting unit as in claim 39, wherein said convection cooling mechanism includes a chimney.

41. (New) A lighting unit as in claim 38, wherein said cooling mechanism is an active cooling mechanism including at least a fan.

42. (New) A lighting unit as in claim 38, wherein said cooling mechanism includes both of fan and a chimney.

43. (New) A lighting unit as in claim 36, wherein said lighting device produces incoherent light.

44. (New) A lighting unit as in claim 43, further comprising at least one lens which focuses light after passing the electro-optical device.

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45. (New) A lighting unit as in claim 36, further comprising a light coloring part which colors at least a portion of the light.

46. (New) A lighting system, comprising:
an information source, storing information about animation frames which represent a moving image; and
a driver, producing an output signal based on said information, which output signal drives an external device to shape the outer perimeter of a beam of light based on said animation frames, thereby producing a control signal that projects light with an animated perimeter.

47. (New) A system as in claim 46, wherein said output signal drives an electro-optical device.

48. (New) A system as in claim 46, further comprising an electro-optical device, which is driven by said control signal.

49. (New) A system as in claim 48, further comprising a lighting element, producing a light beam at a shape according to the animation frames.

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50. (New) A method, comprising:
obtaining information indicative of at least one image; and
producing a signal based on said at least one image which
signal is adapted to control a lighting control device to shape
an output of a light beam according to said at least one image.

51. (New) A method as in claim 50, wherein said at least
one image signal is adapted to control a liquid crystal device.

52. (New) A method as in claim 50, wherein said producing
signal comprises producing a signal which individually controls
each element within the matrix of elements.

53. (New) A method as in claim 50, wherein said producing
signal comprises producing a signal which will form a light beam
of a circular shape.

54. (New) A method as in claim 50, wherein said producing
a signal comprises producing a signal which will form a light
beam of a triangular outer shape.

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55. (New) A method as in claim 50, wherein said signal also controls color of a projected light beam.

56. (New) A method as in claim 50, wherein said signal is produced for an indeterminate time.
